MYRMECIA

News Bulletin of the Australian Entomological Society Inc.
Volume 39, Part 4, October 2003
Australia Post Print Post Publication PP242296/00144.
Price $5.50 (including GST) ISSN 1323-6032

AUST. ENTOMOL. SOC. EXECUTIVE ADDRESS
Australian Entomological Society Executive
c/- Department of Primary Industries
Private Bag 15, Ferntree Gully Delivery Centre
VIC 3156, AUSTRALIA

SOCIETY WEB SITE
http://www.agric.nsw.gov.au/Hort/ascu/myrmecia/myrmecia.htm

Patron
His Excellency, Major General Michael Jeffery AC CVO MC, Governor-General of the Commonwealth of Australia

OFFICE BEARERS

President
James Ridsdill-Smith
CSIRO Entomology,
Private Bag No. 5. PO Wembley,
Western Australia 6014
james.ridsdill-smith@csiro.au

Vice President
Dr P.M. Ridland
c/- Executive Address above
Ph (03) 9210 9222
Fax (03) 9800 3521
Peter.Ridland@nre.vic.gov.au

Secretary
Ms N.M. Endersby
c/- Executive Address above
Ph (03) 9210 9222
Fax (03) 9800 3521
Nancy.Endersby@nre.vic.gov.au
Nancy.Endersby@sci.monash.edu.au

Treasurer
Mr I.D. Endersby
56 Looker Rd
Montmorency VIC 3094
Ph (03) 9435 4781
Fax (03) 9435 4781
endersby@mira.net

Public Officer
Dr E. Jane Wright
CSIRO Entomology
GPO Box 1700 Canberra ACT 2601
Ph (02) 6246 4183
Fax (02) 6246 4202
e.jane.wright@csiro.a

THE COVER

Robbie van Hemert from Newcastle won second prize at Freemantle in the Society Insect Illustration competition with this drawing of a spider.

Promotions Officer
Dr Glynn Maynard
AFFA
GPO Box 858
Canberra ACT 2601
Ph (02) 6272 3544
glynn.maynard@affa.gov.au

Chief Editor
Dr Peter Allsopp
Manager - Special Projects
Bureau of Sugar Experiment Stations
PO Box 86 Indooroopilly Qld 4068
Ph (07) 4132 5200 Fax (07) 4132 5253
Mobile 0408182614 email pallsopp@bses.org.au

Assistant Editor
Dr Tony Clarke
Queensld University of Technology
GPO Box 2434
Brisbane QLD 4001
Ph: (07) 3864 5023
Fax: (07) 3864 2330
A.Clarke@qut.edu.au

Technical Editors
Dr A.L. Bishop
Horticultural Research Station
Box 26 Gosford NSW 2250
Ph (02) 4348 1928
Fax (02) 4348 1910
alan.bishop@agric.nsw.gov.au

Dr K.L. Walker
· Museum Victoria
GPO Box 666E
Melbourne Vic 3001
Ph (03) 8341 7432
Fax (03) 8341 7750
kwalker@musem.vic.gov.au

Dr A. Andersen
CSIRO Wildlife & Ecology
Tropical Ecosystems Research Centre
PMB 44, Winnellie NT 0821
Ph (08) 8944 8431
Fax (08) 8944 8444
Alan.Andersen@csiro.au

SOCIETY SUSTAINING ASSOCIATES

Bayer CropScience Pty Ltd
Integrated Pest Management (Bugs for Bugs)

MYRMECIA

***MYRMECIA* WEB ADDRESS:**

http://www.agric.nsw.gov.au/Hort/ascu/myrmecia/myrmecia.htm

CONTENTS

Editorial	1
Letter	2
Letter to a Shade	2
Digglemania.....	3
Hobart - a student's view	4
AES Business	5
AGM Minutes	7
ICE Progress Report	9
Regional News	
ACT	10
New South Wales	13
Northern Territory	14
Queensland – North	16
Queensland – South	17
South Australia	19
Tasmania	20
Victoria	22
Papua New Guinea	22
Notices	23
Membership Nomination Form	24

NOTICE

Statements made in *Myrmecia* do not necessarily represent the views of the Australian Entomological Society. Items printed herein should not be reproduced without permission of the author of the material.

COPY DEADLINE FOR NEXT ISSUE

Material for publication in our January 2004 issue should be in the hands of the Editor before **Friday 16 January 2004**.

Copy is requested as .rtf e-mail attachments at: laurence.mound@csiro.au

EDITORIAL

Whether it was scientific interest, or the warmth indoors contrasting with the wind off the snow of Mt Wellington all-too-visible above us, the two lecture rooms at Hobart were full throughout our recent Congress. Clearly, it is good for AES to hold joint meetings with other groups of biologists – good socially, intellectually and financially. The number of young biologists present, by no means all members of AES and many not entomologists, was impressive and encouraging. Given our decreasing membership and poor job opportunities in entomology – and the depressing conclusion by our Treasurer, given in his report below, that AES membership life-span averages 10 years – we need to seek actively how to associate with other such groups to our mutual benefit. Writers in this issue of *Myrmecia* raise several interesting questions. Are there further benefits that can be negotiated for members, such as licences to study and collect in National Parks? Is millipede abundance a good surrogate when comparing leaf-litter biodiversity in native and pine forest? What can we produce and market at ICE Brisbane to the benefit of AES – and can we get volunteers to tend the Society stall? How do we attract and retain further members? As Bulletin Editor I proposed to Council that a special issue of *Myrmecia* should be produced for Brisbane. I had in mind a souvenir issue, to complement the special volume of AJE that will be produced and given to all delegates at ICE. My objective would be to impress our visitors with the diversity of entomological investigations and institutes across this continent, and to use the issue as a marketing tool for our Society. In contrast, our incoming Council decided that although a special issue of *Myrmecia* should be produced, this would be available only to Members. Unfortunately, in making this decision, they gave no indication of the purpose of such an issue, nor its proposed content, and I will be very pleased to receive proposals and suggestions of what members would like to see in such an issue. I can visualise a special issue aimed at visiting entomologists, but will need advice from many of you on how to implement the decision by Council that has been handed down to me.

LAM

Letter to Editor

At the meeting of AES in Hobart I heard an outcry over decreasing numbers of members. I would like to offer some comments and possible solutions. I have been a member since about 1983, but I had never been officially asked what I like or dislike as a member or any request for input into society life.

Can we create another type of membership, without the expense of the Journal but with *Myrmecia*? This might encourage amateur entomologists, and even some professionals, who are not able to debit membership fees against their tax bill.

Can we organise some advantages to members, such as permission to collect insects in State Forests?

Can we appoint a "Recruitment Officer" for each State? This officer could also organize exhibitions, lectures and talks at universities and high schools as well as for the general public. I have a feeling that it is important to start organizing courses about collecting, preserving and identifying insects for students and even older citizens.

The Australian Entomological Society is associated with societies from all Australian States. Should we change our name to: "Association of the Entomological Societies of Australia" and thus help to coordinate different events and exchanges between different entomological societies, clubs and other relevant groups?

Vr.R.E.M.J..-B. BEJSAK-COLLOREDO-MANSFELD
[ricardo@ans.com.au]

Letter to a Shade

'...the land and fresh-water fauna is disappearing rapidly, and unless we now make an organized effort it will be too late to study it effectually, and future generations will wonder what manner of people we were not to leave behind us some adequate record of the marvellously interesting forms of animal life which we had succeeded in exterminating...' *Spencer, W.B. 1921. The necessity for an immediate and co-ordinated investigation into the land and fresh-water fauna of Australia and Tasmania*. The Victorian Naturalist **37**(10): 120-122.

Dear Professor Baldwin Spencer,

I've been having a pretty good run lately with the salvage campaign you inspired, but now I've hit a couple of snags.

Just to recap, I'm doing what I can to correct the spectacular east/west bias in invertebrate collecting in Tasmania[1]. It's strange, but the remotest, most secure localities in western Tasmania have been the ones most intensively sampled. Zoologists just can't seem to get enough of those glamorous wilderness habitats. One bizarre consequence is that the one-kilometre square surrounding Pelion Hut in the Cradle Mountain Lake St Clair National Park has the highest recorded invertebrate species richness of any one-kilometre square in Tasmania[2]. (The square just to its east has no recorded species at all.)

Anyway, I've been knocking on farmers' doors a lot and asking permission to collect in bush remnants on farms. I haven't had a refusal yet. Tasmanian landowners seem relaxed about bugs, and are generally keen to hear if I find something interesting.

I try to prioritise the remnants to be salvaged. First, I look for bush areas far from previous collecting sites. This approach has netted me lots of new species, because the Tasmanian invertebrate fauna is highly regionalised. The richest hauls have been on the East Coast, about as far as you can get in Tasmania from those well-studied wilderness areas.

I also look for bush that doesn't have much of a future, like woodlands on overgrazed sheep farms, and scrubby patches on the edge of towns. After all, many of the bugs in those patches will probably be gone in a few years, whereas the invertebrates that get so much attention in national parks and other formal reserves will be around for decades to come.

Back in 1999, I used GIS to do some initial prioritising. I compared the locations of native vegetation remnants with several thousand locality records for a wide range of freshwater and terrestrial species. Both spatial data sets had been compiled for the State's Regional Forest Agreement. The analysis identified 155 vegetation remnants that were more than 10 km from *any* invertebrate locality record. Many of the 155 were less than 75 km from Hobart, Tasmania's biggest city. Two of the three highest-priority remnants (furthest from any known collections) were within 25 km of the city centre.

Most of the 155 remnants were on farms in eastern and northern Tasmania. It looks as if data gaps in invertebrate recording are mainly in areas where habitat fragmentation over many years has created lots of small, isolated patches of remnant bush. Localities where bush is most fragmented and most at risk of further habitat loss and degradation are the localities whose invertebrate fauna is least known. That's just the opposite of what you were hoping for!

For many groups, too, the bulk of the existing records for settled parts of Tasmania are more than 50 years old. They're from an era when those settled parts were where the road ended and the bush began. Most of that bush is gone now.

But about those snags... It seems that remnants have increasingly been attracting the interest of conservation-minded botanists, which is excellent, because many landowners are now actively conserving their fragments of native vegetation. Trouble is, vegetation

can be a very poor surrogate for invertebrate life.

A few weeks ago a friend and I did a snail-and-millipede survey of a small 'Land for Wildlife' remnant near Devonport in northwest Tasmania. Amazingly enough in that particular farmscape, the remnant has some old trees and a native understorey. It's fenced to protect its flora and 'habitat' values. Birds and native mammals love it, but apparently bugs don't. We saw very few native litter invertebrates apart from some common and widespread beetles and ants, and there were plenty of the introduced woodlouse *Armadillidium vulgare*.

Frustrated, we climbed a fence and had a look at a small patch of tea-tree scrub in the middle of the adjoining sheep paddock, just upstream from a dam. I found five native millipedes in abundance in the scrub. My friend was even happier. He'd found no native snails and three introduced species (one abundant) in the prized remnant, and three natives in the scrub. One of the native snail records represented an important fill-in of the species' known range in this long-cleared, intensively farmed area.

I've asked the owner of the tea-tree scrub to consider not extending his dam any further upstream, and will probably visit again to do some more salvaging. There's no possibility that the small scrub patch will get the 'formal' conservation attention that the fenced remnant has earned, because its plant and vertebrate values are negligible.

The other snag has to do with 'ecopolitical correctness'. In the past I thought, like a lot of other people, that *Pinus radiata* plantations were biological deserts. It turns out that for litter invertebrates, at least, they're excellent habitat[3]. This winter, for example, I methodically sampled millipedes in the middle of a 60-year-old pine plantation that had been established on abandoned farmland and that is now surrounded by farms[4]. The first crop had been harvested in the late 1970s and early 1980s, the residues had been burned and the pines replanted. I found abundant millipedes in the second-rotation pine litter. Eleven of the 14 species I collected were natives from the neighbourhood, and natives made up more than 80% of all specimens.

It appears that a good way to help out litter invertebrates in tiny bush remnants on farms – in other words, to lower the risk of local extinction, and lower the priority of such remnants for salvage sampling – is to plant pines up to the remnant edges. But I'd get very strange looks indeed from conservation bureaucrats and many fellow zoologists if I linked plantation establishment to your call for action. Pretty ironic, yes?

Bob MESIBOV

mesibov@southcom.com.au

[1]Mesibov, R. 1995. *An Analysis of Locality Records for Tasmanian Non-Marine Invertebrates, 1970-1994. National Estate Grants Program 1993-94, Project No. 9414*. (Unpublished report; 47 pp.)

[2]Mesibov, R. 1996. *Invertebrate Bioregions in Tasmania. Report to Tasmanian RFA Environment and Heritage Technical Committee*. [online as www.rfa.gov.au/rfa/tas/raa/other/invert/index.html]

[3]Bonham, K.J., Mesibov, R. & Bashford, R. 2002. Diversity and abundance of ground-dwelling invertebrates in plantation *vs*. native forests in Tasmania, Australia. *Forest Ecology and Management* 158: 237-247.

[4]Paper submitted to Pacific Conservation Biology.

Digglemania! Digglebilia! or just Diggling along?

Have you heard the ad on Brisbane FM radio about the undertaker who buried Silvester Diggles in 1880? Or seen his 1860s *Ornithology* displayed this year as one of the treasures of Queensland Parliament? Or realised a jeweller is using his 1870s insect drawings to fashion brooches? Or discovered why Diggles Close was named by the BCC in 1994?

If so, you probably know Silvester Diggles was a pioneer ornithologist, entomologist, astronomer, photographer, artist, musician and churchman of Australia all rolled into one—while earning his family keep as a teacher and piano tuner. From their arrival at Brisbane in 1855 via Sydney until his unfortunate stroke in late 1875, Diggles put his weight behind local institutions, particularly the School of Arts, Qld Philosophical Society, Qld Museum, New Church Society, musical societies and local exhibitions.

Altogether Diggles strove to transplant the kind of culture he had known at civilised Merseyside to colonial Brisbane. To what extent did he succeed?

This is the thrust of *Diggles Down Under*—a publication of the Brisbane History Group. It has something for everyone from students to academics with an interest in the era as a whole or any of the elements above, or simply the man himself, his family, their migration and many associates. Hundreds of bios, images and texts elucidate the life, work and times of Silvester Diggles at Liverpool and Sydney as well as Brisbane (1817-80).

The publication will be available in two formats—a colourful dual CD (including all the birds, insects, notes and letters) with 110-page Manual and/or the Manual with a 2-volume 'Book of the CD'. That provides a hardcopy, with its History section, Library of texts and select images from the Gallery of 700 A4 pages, as a boxed set.

This publication has involved 4-years research in Australia and England, 2-years writing and 2-years production by historian Rod Fisher, a research consult-

ant of the University of Queensland, assisted by multimedia teams at Griffith University. Estimated conservatively at $400,000 in time, materials and charges, and partially supported by several grants, this publication will be launched at a new historical venue before Christmas.

To fund the final printing and determine the actual printrun, *Diggles Down Under* may be ordered at little more than cost by returning a special pre-publication order form with advance payment no later than 20 September. After that date the recommended retail price will be $15 more (other than group discount prices). A further saving of up to $9 may be made by collecting your order at the book-launch or direct from the BHG later in the year (to be notified).

For more information, please contact the Brisbane History Group (PO Box 12, Kelvin Grove, Qld 4059) or e-mail r.fisher@mailbox.uq.edu.au (or phone 07-3254 0265). Do order and pay now to ensure a copy is reserved in your name, as this limited edition may not last for long after publication—also to receive your personal invitation to the grand book launch of *Diggles Down Under*. AES members can request a price reduction of 10 dollars.

Rod FISHER

The Hobart Conference – a student's perspective

"Yep, I'll write a review about the Hobart conference for Myrmecia", I responded to the voice on the other end of the phone, "what angle do I need to take?" "Just give a student's perspective of the conference, your reactions, the good, the bad and the ugly" the voice replied. "Hmmm…the good, the bad and the ugly", I thought, "sounds like fun!"

The flight from Melbourne to Hobart was short, but the view of the snow covered peaks of Cradle mountain made for a great start to the conference. I arrived in Tasmania at midday on the Sunday, which allowed for a preliminary visit to some of Hobart's numerous antique and secondhand dealers. Obviously there were more than a few like-minded opportunistic conference delegates, the phrase, "Do you have any books on insects?" was frequently overheard throughout the next six days.

The conference proper began on Monday morning and after a brief introduction by the cheerful and competent Geoff Allen, the first Plenary session began with Joanne Daly presenting a well balanced and thought provoking dissertation on insect resistant GM crops. Then came decision time, each day of the conference being structured around two concurrent symposia. Fortunately, close proximity of the two lecture rooms and strict adherence to the timetable made symposia swapping easy, thus a large number of people made the most of the diverse range of topics offered. Over the following week, the audience were treated to four plenary sessions, presentations covering 15 symposia, and a slide show. The overall standard of talks was extremely high and although I greatly benefited from the content of many of these I was swept away by the unique beauty of the Bemaraha tsingy karst of western Madagascar captured in the photographs of Arthur Clarke's slide show. Throughout the conference, delegates were also able to view posters, photographs and drawings displayed in the foyer area, with prizes for the best of these and the winning student talks presented at the closing of the conference.

The social side of the conference was a success with generous sponsorship by Boags assisting in networking endeavours. The midweek day off provided an opportunity for exploration or recuperation, depending on the level of indulgence at the conference dinner the previous night. Allegedly, many dedicated investigations of human ethanol tolerance did not cease until the last bar in Tasmania closed! The streets of Hobart provided a plethora of shops, bars, beautiful architecture and spectacular views with the more adventurous delegates investigating the likes of Port Arthur, Mt Wellington and the Botanical Gardens.

In summary the combined conference ran like clockwork, a reflection of the hard work and dedication of those on the Conference Committee and the good people at Conference Design and Staging Connections.

Oh, as for the bad and ugly, I have a tangerine T-shirt that I'd love to trade for one of a different colour!

Michele SCHIFFER

AES Business

AES Executive Meeting #412
13th June 2003

Kevin Davidson, Senior Adviser to the Governor-General, advised AES of Dr Peter Hollingworth's retirement as our Patron.

News from our affiliated society, Entomological Society of New South Wales: Circular No. 535 gave summary of meeting between the Entomological Society of NSW & The Society for Insect Studies - both societies remain independent, but with a new spirit of co-operation

The Vice President aims to convert issues of the red Journal (*Journal of the Australian Entomological Society* - pre-Blackwell Publishing) into searchable .pdf files.

New membership applications

Mr Alexei Rowles, Monash University, Biological Invasions Laboratory, PhD candidate. Project title: The invasion dynamics of the Argentine Ant (*Linepithema humile*) at the urban/bushland interface on the Mornington Peninsula, Victoria. Interests: biological invasions (particularly by social insects), plant/animal interactions (particularly with mites and ants, biological control (Proposed: V. Traicevski, seconded: G. Lefoe).

Mrs Allie Mokany, ANU Canberra, PhD student. Project title: Resilience and resistance of aquatic communities to environmental change. Interests: the evolution and ecology of freshwater macro-invertebrates and the relationship between biodiversity and ecosystem function in aquatic communities (Proposed: L. Cook, seconded: S. Cunningham).

Ms Kathryn Sparks, Senior Entomologist, AQIS, PO Box 1006, Tullamarine VIC 3043. Interests: Apoidea, Coccoidea, Aleyrodidae. Kathryn has also worked for Museum Victoria as Research Assistant/ Collection Manager Entomology (Proposed: G. Maynard, seconded: A. Calder).

Mrs Kim Kingston, Rutherglen Research Institute, RMB 1145, Chiltern Valley Rd, Rutherglen VIC 3685, PhD student. Project title: Understanding the fundamental interactions between grapevine Phylloxera and *Vitis* species. Interests: *Phylloxera* artifical diets, *Phylloxera* digestive system, plant-insect interactions, insect bacterial symbionts (Proposed: K. Powell, seconded: G. McDonald).

AES, Extraordinary Executive Meeting,
15th July 2003

The meeting was called to work on the risk management plan for the Society. Potential risks were identified and ranked.

New membership applications

Aaron Jex, University of Queensland, student (Proposed: M. Schneider, seconded G. Walter)

Peter Langlands, Curtin University of Technology, Homours student (Proposed: T. Houston, seconded B. Heterick)

AES Executive Meeting #413
22nd August 2003

Vice President attended Enterprise Care courses about web site design.

Suneel Jethani, marketing manager Blackwell Publishing, will design an AES advertising brochure for Hobart conference satchels.

Report on FASTS Board meeting 4-Aug-2003 from Murray Fletcher - key points: FASTS genuinely represents a wide range of scientific and technological societies and it is appropriate that AES remains as a member. FASTS have direct access to ministers of science and education in the federal sphere and do not necessarily feed through (nor agree with) the Chief Scientist. The Science meets Parliament day is a valuable and valued FASTS innovation enabling scientists to promote issues directly with relevant ministers or interested backbenchers as well as allowing parliamentarians to seek clarification and information directly from practising scientists. FASTS can do nothing for societies such as ours unless we provide them with information that they can use, eg. an issues paper highlighting where we think government could help entomology in Australia.

Treasurer attended meeting run by Enterprise Care about the role of the Director in a not for profit organisation. AES does not fit the model of Board of Directors and CEO. We must prepare a paper on the structure of the AES looking at potential of having a CEO, potential advantages of policy setting forum versus current Council arrangement. We have raised many duty-of-care issues that will have to be addressed.

The Phil Carne Prize was a great success this year with 10 entries, due to increased advertising and the change to allow students to submit manuscripts published in or submitted to any journal.

A position paper on entomology (suggested by FASTS) will eventually come from our strategic planning process. Such a paper will start when the answers to the strategic planning questionnaire have been collated. The process may need external funding from a body such the Australian Academy of Science.

Minutes of outgoing AES Council meeting

Monday 29th September 2003, Corus Hotel, Hobart, Tasmania

2002 accounts, audited on an accrual basis, show a surplus for the year of $582 (2001 deficit $5,493)

The Treasurer recommended that subscriptions remain at $100 + GST, with the student/ retired subscription remaining at $50.00 + GST. However, full members (but not student or retired members) electing to receive the Journal in electronic format only will pay a reduced subscription of $90 + GST.

Membership at 20th September 2003 was 618 with 62 unfinancial. Membership recruitment is the most critical issue facing the Society.

Myron Zalucki reported that ICE organisation was on track. Funding has been obtained from the Queensland Government and the financial situation is meeting expectations. Scientific Program is in place, and promotion efforts are accelerating. John Matthiessen has joined the finance committee. Tony Clarke has agreed to be Vice President of the Congress Organising Committee.

Special ICE issues of the Journal (Vol. 43, No. 3) and *Myrmecia* will be published in early August 2004.

Discussion centred on how to keep unfinancial people on the books as members for 12 months rather than 5 but to limit the Society's financial losses by excluding such people from benefits. Recommendations have been made to manage identified risks to the Society, and also about recruitment strategies, council volunteers being needed to assist Executive with both activities. Identified problems include scientists using insects as target organisms who consider themselves ecologists not entomologists, and short term contract employment.

Seventeen recommendations have been made for Society honours, and the Executive needs Council assistance with implementation. Council members were reminded that 2004 will be a Mackerras medal year. The President has been asked by the Executive to form a small committee to list potential Honorary members for the Society.

In 2004, ICE will take the place of the Scientific Meeting, but Council meetings will be held as usual. The AGM will be followed by a reception for Executives of international entomological societies. This reception will include the Presidential address, launch of the ICE issue of the Journal and presentation of the Mackerras medal.

The President reiterated that the AES will have a booth at ICE with items for sale and for promotion of entomology. The President will ask Glynn Maynard to coordinate a committee to promote AES at ICE. Bronwyn Walsh, Regional Councillor for Southern Queensland, and Jane Wright have agreed to participate.

Murray Fletcher reported that the current web site is not imminently threatened with closure by NSW Agriculture, thus giving the Society time to plan changes properly in time for ICE. A detailed brief of web site requirements must be prepared. A. Clarke suggested the web site be used as a membership recruitment tool by including member-only access to pages such as employment vacancies.

Murray Fletcher has assembled a team to run the next Executive in Orange NSW starting at the ICE 2004. Proposed office bearers include Murray Fletcher (Vice President), Geoff Gurr (Secretary) and Graham Thwaite (Treasurer).

The 36th AGM & Scientific Conference is due to be held in SA or Victoria.

Peter Allsopp will retire as Chief Editor at ICE. A. Clarke has agreed to take over the position at that time. In the interim, the Executive has appointed him as Assistant Editor to facilitate the changeover. Two new Technical Editors will be required to replace A. Clarke and A. Bishop (also retiring).

Minutes of incoming AES Council meeting

Thursday 2nd October 2003, Corus Hotel, Hobart, Tasmania

Council decided that a special ICE issue of *Myrmecia* should be prepared for Australian members and usual subscribers, with a small number of display copies for AES ICE booth. It will not be included in ICE satchel. This special issue could be sent electronically to non-member ICE delegates from Australia and the near Pacific to promote membership. An AES membership form/pamphlet that advertises *Myrmecia* and the Journal will be prepared for ICE.

J. Ridsdill-Smith spoke of the great value of joint meetings as demonstrated by the success of the Tasmanian meeting. Future joint meetings should have formalised profit/loss sharing agreement.

Proposal for subsidising entomologists from the South Pacific for AES membership. President suggests that a major fund-raising effort would have to be made to implement such a subsidy. Executive will clarify Blackwell Publishing's position on consortium for developing countries to receive cheaper access to its Journals.

S. Grove suggested fund raising by publishing a book. Miscellaneous publications series could be continued. Councillors to think of ideas for the future and to raise them with Promotions Officer.

The President is keen to forge links with other related societies. Responses from strategic planning questionnaire will be collated and the Executive will

produce a strategic plan that, if appropriate will contain a broader definition of entomology to enable links with other biologists to be forged.
Request that future AES scientific meetings be restricted to three days' duration. Question will be put to members in strategic planning questionnaire. Results will be assessed.
Web site - Executive will prepare a brief with specifications for new web site and will send to it to M. Fletcher and G. Maynard for action.

Minutes of the 34th AGM of the Australian Entomological Society

Thursday 2nd October 2003, Corus Hotel, 156 Bathurst St, Hobart, Tasmania

A moment's silence was observed for deceased honorary members, Dr Elizabeth Marks and Dr KR (Dick) Norris.
The vice-president thanked the Tasmanian Organising Committee for their professionalism, enthusiasm and hard work toward the excellent joint scientific meeting at Hobart.
The core executive met formally 10 times since the last AGM. The Society continues to focus on ICE 2004, the success of which will require substantial input from members. Some 145 members took up the Super Early Bird offer thus providing valuable cash flow.
Declining membership is a problem, and Members are the most effective recruiters for the Society. Over recent years, recruitment has been insufficient to offset losses and membership has been falling. The Executive has prepared a draft membership recruitment plan, which recognises the need to define particular target groups and simultaneously introduce new benefits of membership.
One of the largest expenses of the Society is the production of the *Australian Journal of Entomology*. To ensure that the best price and conditions were being attained, the Executive invited four publishers to tender for the contract which commences in January 2004. One withdrew, one provided only a partial publishing service, and the other two were extremely close in what they offered. An assessment team chaired by the President recommended that we continue with our current publisher, Blackwell Publishing Asia. The Executive was pleased that the closeness of the tenders confirmed that we have a cost-effective arrangement.
The Executive has been reviewing a number of management and governance issues. As well as the review of the Constitution and By-Laws that the Society is considering this week, reports on Risk Management, Membership Recruitment, Awards and Honours and Privacy Policy have been considered by the Council in Hobart.

Prize for Student Talk
sponsored by CSIRO Publishing
First Prize - Cameron Spurr
Second Prize - Marta Kasper
Third Prize - Andrea Ballinger
Fourth Prize - Elizabeth Lindsay

Prize for Student Poster
sponsored by Blackwell Publishing Asia
First prize - Hayley Sharp
Second Prize - Katherine Harrison
Third Prize - Shannon Thompson

Treasurers Report

2002 Annual Accounts

The Annual Accounts are presented on an accrual basis which means that income and expenditure relates only to those activities undertaken in the year 2002. The subscription rate for 2002 was set at the 32nd AGM held in Manly in 2001. It was agreed at that meeting that the subscription increase necessary to cover costs would be introduced in two annual tranches and, consequently, a deficit of the order of $10,000 would still be occurred in 2002. However, a substantial surplus from the Fremantle Conference, realisation of increased page charge levies sooner than anticipated, and reduced Executive costs due to in-kind donations, resulted in a surplus of $455 for the year. The only qualification to the auditor's report was the write-off of $760 in the stock of the Upton book due to inventory errors in previous years. With the transfer of all stock to Melbourne a full reconciliation was possible.

2003 Cash Flow

While the conference surplus and increased page charge income were attributed to 2002 they were received in 2003. This, together with the second tranche subscription increase, means that there will be a cash flow surplus for the year estimated at about $3,500.

Membership

At the middle of September there were still about 60 members with subscriptions in arrears. This is nearly 10% of the membership and represents something like $5000 in potentially lost income as journal and other per capita costs for these members have already been paid. Under the rules of the Society these members will be suspended at the end of the year and receive no further publications until they have paid. Normally most of those in arrears at this stage of the

year do not pay and are lost to the Society. Over the years a 10% per annum loss seems to be the average, implying the life of an entomological member is ten years.

Subscription Rates

No major changes in the operation of the Society are foreseen for the next twelve months so the subscription rate can remain at $100 for full members and $50 for student or retired members plus GST where applicable.

It is recommended that those full members who take the journal in electronic format only, and who pay their subscriptions by 31 January 2004, pay a subscription of $90 plus GST. The timing restriction is included because the choice must be made before the first part of the new volume is issued.

Income and Expenditure Statement

For the year ended 31 December 2002.

INCOME	
Subscriptions and sale of Publications	$ 43,020
Interest Received	$ 1,208
Royalties and Page Charges	$ 14,853
Conference Surplus	$ 8,082
TOTAL INCOME	$67,163
LESS EXPENDITURE	
Audit & Accountancy	$ 909
Prizes and Awards	$ 1,750
Bank Fees	$ 1,770
Journal - Professional Fees	$ 7,968
Journal - Publishing	$ 50,593
Postage	$ 532
Sundry Expenses	$ 286
Subscriptions & Memberships	$ 2,900
TOTAL EXPENDITURE	$ 66,708
SURPLUS	$ 455

Balance Sheet

at 31 December 2002

ACCUMULATED FUNDS	
Accumulated surplus b/f	$ 55,392
Operating Surplus	$ 455
Revaluation of Stock	$ (760)
TOTAL FUNDS	$ 55,087

represented by:

CURRENT ASSETS	
CBA Cheque Account	$ 33,418
CBA Term Deposit	$ 32,676
Accounts Receivable	$ 20,328
Stock of Publications	$ 5,115
Prepaid ICE2004 Registrations	$ 7,146
TOTAL CURRENT ASSETS	$ 98,683
CURRENT LIABILITIES	
Accounts Payable	$ 11,524
Subscriptions received in advance	$ 22,131
Prepaid ICE2004 Registrations	$ 7,307
GST Clearing	$ 2,634
TOTAL CURRENT LIABILITIES	$ 43,596
NET ASSETS	$ 55,087

Chief Editor's Report

The flow of manuscripts, July 2002-June 2003, was (last full year in brackets):

Manuscripts received	73 (53)
accepted	63 (46)
rejected/withdrawn/lapsed	17 (10)

The number of manuscripts received during the year was higher than that reported at the last AGM, hopefully reflecting an increased enthusiasm for the journal. Acceptances have been relatively constant through the year, with all issues being filled (or over filled) according to our contract with Blackwells. Volume 42 Part 4 (November) has been filled enough copy is accepted to fill Volume 43 Part 1.

The electronic handling of all manuscripts from submission to proofs has reduced significantly the time for refereeing; we set a new record for refereeing during the year at 6 hours from submission!

The journal will publish a special issue of papers showcasing Australian entomology for distribution to all delegates at the ICE next year. Authors have been contacted and subjects agreed on.

Table of AJE statistics

Volume	Part	Published	Pages	Papers	Reviews/Thesis summaries
41	3	19 July 2002	86	11	3
41	4	18 October 2002	103	15	1
42	1	7 March 2003	94	12	1
42	2	29 April 2003	119	14	2
42	3	7 August 2003	98	13	1

Promotion
The availability of Blackwell's journals electronically has increased dramatically the availability of the journal in overseas libraries. Blackwell Science also continues to target the *Journal* at exhibitions at relevant major conferences and meetings, direct marketing through promotional material, especially in Europe, North America and East Asia, and through advertising in other Blackwell Science journals. All corresponding non-member authors are sent a free copy of the issue in which their paper appears and a letter offering an introductory discount of 25% on subscription. This offer is extended to their co-authors, colleagues and affiliated institutions.

News Bulletin Editor's Report

The objective of the Bulletin is to keep members informed of entomological activities across this continent. However, as a peripatetic entomologist myself, it continues to be clear to me that there are enclaves of insect activity around Australia about which we never hear, and I suggest that Councillors consider how they might gather such additional news and potential new members for the Society.
Printing costs have totalled $6875.00, and have thus been kept within those of the previous year's total ($7359), although this has also involved reducing the number of pages published (100 down from 116).
Oct. 2002; 28 pages, 600 copies; printing $1804.00
Jan. 2003; 20 pages, 600 copies; printing $1672.00
Apr. 2003; 28 pages, 600 copies; printing $1705.00
Jul. 2003; 24 pages, 600 copies; printing $1694.00

Conservation Committee Report

The NT has recently listed a range of rare insects that are potentially, at risk. As usual, we have insufficient information to know their true status. CSIRO in Darwin is continuing to work closely with the NT Government's Biodiversity Unit, providing invertebrate (especially ant!) input into a range of land-use impact projects throughout northern Australia, under the auspices of the Tropical Savannas CRC.
Jonathan Majer continues to represent the conservation of invertebrates by serving on the WA Threatened Species Committee.
Robin Gunning concluded a 7 year stint representing the AES on the NSW Threatened species Scientific Committee on 31 December (7 years fighting the NPWS is long enough for anybody!). Tish Silberbauer has replaced Robin on this Committee. Recent preliminary determinations for listings in NSW include *Phyllodes imperialis* as an endangered species in NSW and the removal of dead wood as a key threatening process.
The future of the Balls Pyramid population of the rediscovered Lord Howe Island Phasmid continues to be of great concern to the Conservation Committee.

ICE Progress Report

There is now less than one year to go! The registration brochure has been produced and distributed, and the website has been updated. The Science program committee has organised a comprehensive program of symposia that covers all aspects of entomology. The list of Section and Symposia organisers reads like a "who's who" of international entomological science and will attract further contributed papers. Unlike other Congresses, we have left space for contributed papers in each symposium as well as space for contributed symposia. This will be the first congress to offer Electronic posters. The plenary speakers highlight the global village nature of entomology with speakers of outstanding calibre and who are truly citizens of our global village.
The promotions committee has been selling the Congress to the American and Japanese entomological fraternities. ICE organisers attended the ESA meeting in Fort Lauderdale and Japanese Applied Entomology and Zoology meeting in Morioka . Promotion of the ICE by Australian entomologists and colleagues has continued and a major promotional push is planned with the release of the registration brochure. We will distribute the brochure at meetings in person, as well as via Journals as inserts, and at the International Plant Protection Congress in Beijing (May 2004). If you have any other suitable avenues for distribution please contact Tony Clarke, Promotion Committee Chair. Word of mouth remains one of the best ways of promoting the Congress and we urge members to invite their colleagues to check out the web site, submit a paper, register and attend.
The finance committee has been particularly active over the last year. We have now attracted sponsorship from UQ, CSIRO, ACIAR, CRDC, GRDC, QDNR&M, QDPI and others (to be announced). A major coup has been securing major funding from the Queensland Government. The hunt for private industry sponsorship continues. Approaches to HAL, the federal Government and other organisations (e.g. Rockefeller Foundation) are planned in the near future. Max Whitten's interpersonal skills and persistence in chasing funding are beginning to pay off. I am sure he would welcome suggestions on possible funding sources. If you know of any industry or business that might be interested in displaying at the Congress, please get them to contact us.

REGIONAL NEWS

AUSTRALIAN CAPITAL TERRITORY

CSIRO Entomology

Joanne Daly, Chief of the Division of Entomology, was recently awarded a Public Service Medal for outstanding service in development of Australia's national research priorities, and to science and its application. Congratulations for an honour well deserved. Having now been Chief for over 8 months, Joanne has announced some changes in the structure of the Division, in response to changes in CSIRO such as the flagship and emerging science initiatives and the need to focus the research effort into larger teams with a stronger cross-disciplinary focus. The large number of projects will reduce to 12 streams in the new parlance. **Mark Lonsdale** (of biological control of weed fame) becomes an assistant Chief, joining **John Curran** who is the deputy Chief. **Ray Akhurst** (of nematode fame) joins **Gary Fitt**, **James Ridsdill-Smith**, and **John Oakeshott** as a Strategy Director. **Jim Cullen** retired officially at the end of July, after 33 years productive years in CSIRO. Jim has much to be proud of scientifically – his work on the control of skeleton weed, input into the legal challenge regarding the biological control of Patterson's Curse and his leading part in the construction of the high security quarantine facilities in Canberra and Perth. In recent years, as Chief, he led the Division through difficult times, and implemented significant changes that were fundamental to ensuring a sound financial and scientific footing for the Division for the future. Fortunately, Jim will continue in the Division as an Honorary Fellow so he isn't completely lost to us!

Rob Floyd has recently accepted a secondment to the Commonwealth Department of Prime Minister and Cabinet (PM&C), where he will be part of a team to establish a small unit to coordinate science, engineering and technology (SET) support in the area of counter-terrorism. The SET Unit will review Australia's science, engineering and technology needs and capabilities, and develop strategies to enhance our national counter-terrorism preparedness. Rob is well qualified for the position, having recently played a leading role in the development of CSIRO's Secure Australia cross-divisional program.

Grant Farrell, previously in the Forest Entomology project, left the lab bench in August for 12 months to take a secondment in the newly established Office of the Group Chair Environment & Natural Resources (ENR) (and yes that is a mouthful – just try and work out how you would answer the phone). All CSIRO's Divisions are now organised in four, self-managed teams of Divisions under the leadership of a Group Chair and Grant will be working as Executive Officer to the ENR Group Chair Steve Morton. As with most EO positions this involves organising, organising and still more organising with a lot of time spent phoning, emailing and juggling Outlook calendars with Steve's EA to make sure he can find 28 hours in the day. In between all this, there is the odd briefing note to write, parliamentary submission to coordinate, workshop to setup and meeting to prepare for and coordinate.

From an internet café in the Philippines, **Denis Anderson** reports that he attended an OIE workshop in Paris from 28-31 July 2003 developing policies for world trade in bees and bee products. Denis is currently in Asia working on *Varroa* and *Tropilaelaps* mites and Asian honey bees.

News from the termite group is that **Theo Evans** has started a one year Humboldt Fellowship at Bayreuth University in Germany, studying the population genetics of *Mastotermes*. **Michael Lenz** has just returned from presenting an invited paper on recent innovations in termite management in Australia at the Conference on Global Innovation and Modern Techniques for Urban Pest Managers. Michael says that it was the first joint pest control conference between Malaysia and Singapore and that it was one of the best pest control conferences of recent times.

The Stored Grain Research Laboratory has maintained its usual high level of activity over recent months. Some of the excitement is coming from the imminent publication of **David Rees**' book on the insects of stored products. It will be a profusely illustrated guide to the beetles, moths, and other insects that infest stored food, with details of their biology, life cycles, distribution and significance as pests. Publication is expected early next year, by CSIRO Publishing. **Stephen Beckett** has travelled to the USA for 2 months to do collaborative work on control of stored grain insects by selective heating processes. After a year and a half of painstaking lab work, searching for microsatellites in *Liposcelis* species, **Katarina Mikac** is finally able to report that she has been successful in locating numerous (GATA) repeat units. This is a significant breakthrough and achievement as it is the first of its kind (of research) conducted for the Psocoptera. With this under her belt, the rest of her PhD with the University of Canberra and CSIRO Entomology, should be a snap! The CSIRO SGRL has just published the first edition of a proposed new bi-annual newsletter OUTTURN: <http://sgrl.csiro.au/news/outlook_edition_01.pdf>. This is not designed to be a carriage for research, but for more general happenings within the Australian grains and commodity storage industry.

Jane Wright moved in July from Head of the Stored Grain Research Laboratory to commercialisation manager of novel chemicals in Entomology's Business office. Her primary role is commercialisation of the new fumigants developed by the SGRL. In addition, she is spending most of her time in the first 6 months on secondment to CSIRO's corporate business development and commercialisation group. **Colin Waterford** has taken up the reins as Head of the SGRL, and says he's happy in the job so far.

It's now over a year since **Richard Milner** retired and metamorphosed into an Honorary Fellow. He reports that he is playing a lot more music and enjoying spending more time gardening, but he still has a big commitment to insect pathology and in particular to the development of *Metarhizium* as a biopesticide. He has been checking the quality control of the Green Guard and BioCane products, both now produced by BioCare Technology, and also supplying mother cultures for their commercial-scale production. Green Guard is being tested in China at the moment and he recently returned from a trial in Madagascar using their isolate produced in Wodonga. The Green Guard product is not sold much at the moment as the drought had a negative effect on locusts but BioCane sales for this season are going well.

Richard is involved in an ACIAR project on taro beetle control and this has involved trips to PNG, Fiji and Kiribati, and he has also been to India to advise on an India/Swiss collaborative project looking at *Metarhizium* for control of *Heliothis* on pulse crops. In addition to all that, he has been collaborating with Kathy Braithwaite (BSES, Brisbane) to transfer all the sugarcane-derived isolates to their culture collection. His collection of 1400 living (mostly!) isolates of insect pathogenic fungi will continue to be a key part of his work. Shortly he will start to duplicate much of the collection and add the isolates to the USDA collection at Ithaca so that the collection's future is more secure. Richard says he has written fewer papers that he'd hoped to by now, but given all the other activities; they'll have to wait until next year! We wish Richard the best in his continuing endeavours with *Metarhizium*.

On a lighter note, staff from CSIRO Entomology, including **Peter Annis**, were busy recently at lunch times and after work for several weeks, constructing a scarecrow for the spring Floriade Festival in Canberra. Befitting the theme of "The Heavens in Bloom", the scarecrow, nicknamed "SOL" is a personification of the sun, as a sunflower rising out of the solar system. The scarecrow was entered in the name of "Social Insects".

Joanne Daly, **Katarina Mikac**, **Laurence Mound**, **Rolf Oberprieler**, **Kim Pullen**, **Trudi Wharton**, **Alice Wells** and **David Yeates** attended the Hobart AES conference.

ANIC

The ANIC mite laboratory is currently entertaining visitor **Cal Welbourn** from the Florida Department of Agriculture. Cal is sorting out the ANIC collection of mites in the family Erythraeidae. This family includes the small red parasitic mites that are often found attached to insects of all kinds, and whose adult stages are large long-legged red mites that are predators of mites and small insects.

The Lepidoptera section held an informal 'ANIC Moth Weekend' on 18-19 October, attended by more than a dozen amateur and professional moth enthusiasts from all over the eastern half of the country. The wing scale sleuths retired to the bushy surroundings of the adjacent National Botanic Gardens for lunch each day, probably to talk about moths.

John Tennant of the UK visited ANIC briefly to study south-west Pacific butterflies. **Marianne Horak**, while on holidays in Europe, visited London to return hepialid material to the Natural History Museum. Honorary Research Fellow **Ian Common**, of Toowoomba, has received the Jacob Hübner Award from the Association for Tropical Lepidoptera, in recognition of significant contributions to the advancement of lepidopteran systematics.

Joanna Hamilton has been awarded an Honours degree for her thesis on the morphological and molecular systematics of *Mycomya* a Mycetophilid fly that has a role in pollination of the orchid genus *Pterostylis*. She delivered a talk to the Orchid Society of Canberra on the topic. Joanna and **Anne Hastings** are now working on an interactive electronic key to Australian fly families; the project is overseen by **David Yeates**, with matrices being prepared by **Don Colless** and contributors from other institutions.

David Hollis, associate of the Natural History Museum, London, and his wife Jean, have returned to the ANIC for further work on an ABRS-funded book on Australian Psylloidea. **Laurence Mound** has also been travelling; to Budapest to talk at a meeting of European thrips workers, to London to look at Museum collections, to Dresden to talk at the Phylogeny of Insect Orders Symposium, to Halle to work with Gerald Moritz on their next ThripsID system that includes molecular methods of identifying eggs and larvae, to Tasmania to look at the snow and talk at Hobart, to Perth to give a thrips training course (see next page), and to Geraldton and Carnarvon to visit thrips hot spots with **Sonya Broughton** and **David Cousins**, courtesy of **Nic Monzu**.

Sonya Broughton, Michelle Pether & David Cousins (WA Agriculture)
training thrips with Mike Grimm, Chris Norwood, Jan Botha, Rebecca Graham, & John Moulden

An opus on Australian water bugs, co-authored by **Tom Weir** and **Nils Andersen** of Copenhagen University, is with the printers after a long gestation. Look out for announcements! Tom is now free to return to processing the bugs and beetles from the Pilbara field trip, assisted by **Ben Boyd**. **Adam Slipinski** will attend the ESA meeting in Cincinnati to participate in a symposium on cucujoid beetles; while in the US he will also visit the Smithsonian Institute and Chicago's Field Museum, primarily to look at world coccinellids to try to clarify generic concepts. The trip is funded by an ABRS grant.

On his last (autumn) trip to Tasmania, **Chris Palmer** found *Apteropanorpa* scorpion flies in yet more localities. Hard field work requires constant rehydration, and Chris's studies have produced a distributional map of Boags and Cascade pubs showing no sympatry whatsoever. In fact a line across the state practically divides the two beverages.

The hymenopterists announce that an electronic key to the world genera of eulophid parasitoids of agromyzid leafminers should be live on the Internet, linked to the ANIC Web page, by the time you read this. **Dino Reina** and **John La Salle** are the authors. A paper by Dino describing two new Asian eulophids is in press. **Nicole Fisher** has temporarily left us on maternity leave—**Tracey Parker** from our regional laboratory in Narrabri, NSW, is ably filling Nicole's shoes.

Two important private collections, earlier donated to the ANIC, have now been fully incorporated. The **John Stockard** collection of Lepidoptera from Wingham Brush, NSW was amassed over a period of ten years and contains numerous important host records. The 47,000 Coleoptera of the **Stan Watkins** collection will be of vital help in documenting the fauna of NSW. Both collections were received in immaculate condition.

Version 2.0 of BioLink has been released. Its most noteworthy new feature is the ability to store and manage descriptive information based on morphological characters.

Commonwealth Department of Environment and Heritage

Australian Biological Resources Study

ABRS 2003-04 grants have been awarded for a suite of entomological projects, including work on a genus of Trichoptera by **David Cartwright** (Victoria); eriococcid scale insects by **Lyn Cook** (ANU, Canberra) & **Penny Gullen** (UC Davis, California); subterranean fauna of inland Australia, especially beetles, by **Bill Humphreys** (WA Museum) & **Chris**

Watts (SA Museum); chrysomelid beetles by **Chris Reid** (Australian Museum); a key to Australian ladybird beetles by **Adam Slipinski** (ANIC); a group of braconid wasps by **Nick Steven** (University of Adelaide); and an interactive key to Australian Hymenoptera by **Andy Austin** (University of Adelaide) (see *Biologue* 2003).

Note that ABRS is calling for two types of grant applications in the latest round to close on 10 November 2003: Research Project Grants and Biodiversity Information Product Grants. For details, visit the ABRS website at www.deh.gov.au/biodiversity/abrs/admin/grants/.

Mohammad Iqbal has taken a short secondment from ABRS to the Sustainable Wildlife Industries section of the Department of the Environment and Heritage where he is broadening his experience. His support for management of the Australian Faunal Database is sorely missed in ABRS.

Two *Zoological Catalogue of Australia* insect volumes were among four in this series that received a 2003 Whitley Award, a commendation for the best catalogue series: *Vol. 27.3B, Hemiptera: Heteroptera: Pentatomomorpha*, by **Gerry Cassis** and **Gordon Gross**, and *Vol. 29.5 Buprestoidea*, by **Chuck Bellamy**. These are the last insect volumes ABRS will produce in the traditional *Zoological Catalogue of Australia* series form. From now on, ABRS will work towards making lists of Australian species available online through the Australian Biodiversity Information Facility (ABIF). However, where there is a perceived need for hard copy publication of checklists, ABRS may be interested in supporting their development and publication.

Agriculture, Forestry and Fisheries Australia
Office of the Chief Plant Protection Officer

Graeme Hamilton has taken over from **Bill Roberts** as Chief Plant Protection Officer at least until the novelty wears off for all concerned. Graeme has been heard to claim that what he knows about plant pathology "will easily fit on the back of a postage stamp, if you can find one small enough", and he has set about proving that. In August **Graeme Evans**, **Ian Naumann**, **Jacek Plazinski**, **Emma Lumb**, **Leanne Murdoch** and **Eli Szandala** attended the 6th International Conference on Plant Protection in the Tropics in Malaysia. **Glynn Maynard** and **Ian Naumann** attended the AES Conference in Hobart.

Australian Plague Locust Commission

Metarhizium is the flavour of the (every) month with staff recently involved in exotic locations. **David Hunter** continued collaboration with colleagues in China where flood mitigation has increased the amount of habitat suitable for migratory locusts. Ironically, major flooding interrupted the trials. **Peter Spurgin** worked with FAO, CABI Biosciences and the International Red Locust Control Organisation, to test the African isolate "Green Muscle" in western Tanzania. Apart from a successful trial Peter's highlight was being mugged no more than twice. **Paul Walker** was neither flooded nor mugged while attending the AES Conference in Hobart.

Australian National University
Department of Botany and Zoology

BoZo had a strong contingent at the Hobart conference, with **Amber Beavis**, **Mike Braby**, **Lyn Cook**, **Paul Cooper**, **Allie Mokany**, **Dave Rowell**, **Hayley Sharp** and **Trudi Wharton** attending.

Kim PULLEN, Jane WRIGHT, Alice WELLS

NEW SOUTH WALES

University of Western Sydney

Mukhter Hossain, Centre for Horticulture and Plant Science, Hawkesbury Campus, is writing up his PhD on laboratory susceptibility of azalea lace bug, *Stephanitis pyriodes* (Tingidae), to an isolate of *Beauveria bassiana*. Under controlled environmental conditions, up to 100% mortality was obtained using direct application of spores to final instar larvae. Cadavers and the nymphal exuviae showed considerable sporulation. As the last instar larvae tend to feed in clusters, sporulating cadavers may continue the infection after the initial application.

University of Sydney

Chris Weldon, Fruit Fly Research Centre, School of Biological Sciences, is in the final year of his PhD, examining aspects of biology of Queensland Fruit Fly, *Bactrocera tryoni* (Tephritidae), at low population densities. This has considerable relevance to the establishment of founder populations at the start of outbreaks of flies in areas usually free of these insects. He has extended his work to determine the effect of mass rearing and sterilisation on mating behaviour of male *B. tryoni*.

Of three PhD students in the Agricultural Entomology group, **T Swaminathan** is continuing his project on field ecology and insecticide resistance mechanisms in Western flower thrips, *Frankliniella occidentalis*. In addition to the field work, Swami is now working on laboratory bioassay of the thrips under the supervision of **Grant Herron**, Elizabeth Macarthur Agricultural Institute, NSW Agriculture. Once the bioassays have been completed, Swami

will be looking at resistance mechanisms under the supervision of **Harley Rose**. **Afsheen Shamshad** has recently started her PhD on managing flies and *Verticillium* disease in cultivated mushrooms. The project is supervised by **Alan Clift** and **Harley Rose**, involving field work, laboratory studies and growing experiments in the Mushroom Research and Development Unit at the University of Sydney. **Vincent Eziah** has just started his PhD project looking at field ecology and insecticide resistance mechanisms in diamond back moth, *Plutella xylostella*. The project is supervised by Alan Clift and Harley Rose, involving field work and laboratory studies on both resistance testing and resistance mechanisms.

Alan CLIFT

NORTHERN TERRITORY

Department of Health and Community Services
Medical Entomology Branch

We have just carried out our first helicopter spray of the dry season for breeding sites of salt marsh mosquitoes, with varied success. Great control was achieved in most areas but one section under dense mangrove canopy had a delayed flooding and some control difficulties, which resulted in our first moderate rise in salt marsh mosquitoes for the season. The pest problem was however minor and mainly near two suburbs.

Mosquito numbers are low everywhere else in the NT. Particularly pleasing is the lack of disease vector mosquitoes in the Alice area, as the draining of an effluent swamp and new effluent management practices begin to show effects. This should be great news to locals and tourists.

The branch restructure is nearing completion with three professional positions nearing finalisation after interviews. This should provide some stability to the branch and bring the reorganisation of duties nearer to completion.

Nina Kurucz as operations manager has been handling day-to-day operations of monitoring and working on the branch annual reports, with the able assistance of **Jane Carter**, **Leah Stratford** and **Jennifer Grigg**. **Gisi Lamche** is writing up reports as well as preparing a new information pamphlet with **Peter Whelan** and AQIS to inform port personnel of the dangers of exotic Aedes mosquitoes. We have just had a batch of illegal fishing vessels and more are expected soon, increasing our risk of more importations of exotic mosquitoes.

Allan Warchot has been busy finalising engineering control operations while at the same time writing up the biting insect report for the new Gas plant at Wickham Point in Darwin Harbour. The site is surrounded by mangroves and already one sizeable new mosquito-breeding site has been highlighted and rectified. The rectification of a large remaining area of bomb craters is nearing completion, which should simplify salt marsh larval control operations in Leanyer swamp.

Peter Whelan and **Gisi Lamche** attended the Qld Tropical Public Health Unit Dengue Management workshop in Townsville in late August. Peter gave two papers and renewed contacts and exchanged information. This followed Peter and **Jane Carter's** visit to **Scott Ritchie**'s lab in Cairns in July to assist and learn about dengue outbreak control.

The branch had a very worthwhile visit from **Michael Brown** from FMC chemicals in September, who gave a number of presentations to Councils and the Defence forces on bifenthrin. There are prospective applications of this chemical for control of midges and mosquitoes in a number of local situations.

Department of Infrastructure, Planning and Environment
Parks and Wildlife Service

The Gove crow butterfly, *Euploea alcathoe enastri*, has been nationally listed as endangered, with the major threats being invasions of yellow crazy ants (*Anoplolepis gracilipes*) and giant African Mission grass. The status of Leichhardt's grasshopper *Petasida ephippigera* has been locally downgraded from vulnerable to near threatened following discoveries of new populations and host plants. **Colin Wilson** presented papers on both species at the recent AES/Invertebrate Biodiversity and Conservation joint conference in Hobart.

All of Colin's arachnophobic nightmares have come true with the recent proposal by a local pet shop to breed tarantulas in captivity. He attended the unearthing of a particularly large and unhappy female tarantula from a patch of bush on the edge of the Darwin suburbs in which he regularly (but never again) enjoyed walking. In order to prevent the unrestrained extraction of these cuddly critters from the wild, they and a couple of genera of the larger scorpions have been declared protected species and captive breeding to supply the psychos who like them as pets will be encouraged.

Northern Australia Quarantine Strategy

Training local aboriginal ranger groups in biological specimen collection and preservation techniques is becoming an important task for NAQS entomology in NT. **Glenn Bellis, Angela Profke, Andrew Mitchell** and **Peter Stephens** made a trip into Arnhem

Land in July to train three such groups in entomology, botany and plant pathology respectively. Negotiations are underway to include this training into formal education being undertaken by rangers at NT University and the Batchelor Institute.
Glenn and Aboriginal Liaison Officer **Ray Petherick** also travelled to Ngukurr to deliver results of a previous plant health survey there. They also assisted the Yogul Mangi rangers in Ngukurr to establish an eradication program for the introduced ant *Pheidole megacephala*, which was detected for the first time during the survey in May.

Department of Business, Industry and Resource Development
Entomology Section
It's all go for the Northern Territory with the completion of the long awaited rail connection to the southern states. With the sun beating down on the newly laid tracks, we are heading towards the build-up to the wet season. Mango harvest is almost in full swing and the rambutan and citrus fruit are also coming into season.
Megan Connolly attended a Citrus Entomology Meeting held at the Centre for Horticulture and Plant Sciences, University of Western Sydney, Hawkesbury Campus, from the 23-26th August. In September, **Deanna Chin** and **Haidee Brown** visited Megan in Katherine to discuss various pest problems in citrus and mangoes. Visits were made to various mango and citrus orchards to inspect damage caused by *Campylomma austrina* and *Scirtothrips dorsalis*.
Brian Thistleton and **Michael Neal** escaped from the office and ventured out into the outback as far as Ti Tree to carry out various trials on *Mastotermes darwiniensis* and *Microcerotermes* in grape vines. Heather Wallace managed to travel a bit further into the outback and reached Alice Springs. This is where she stayed for three weeks to assist on an eradication program for sterile male releases of *Bactrocera tryoni*.
Lanni Zhang has taken on the duties of identifying quarantine specimens and has been inundated with ants, flies, stored product pests, spiders, spider eggs and the eggs' parasitic wasps. **Graham Brown** has been offering technical advice to Lanni although he has been seconded to work with AQIS for twelve months.

CSIRO Sustainable Ecosystems
Alan Andersen and **Tracy Dawes-Gromadzki**, along with others have returned from a few weeks in South Africa. The aim of the trip was to develop a range of collaborative projects between CSIRO Sustainable Ecosystems, the Tropical Savannas CRC and savanna researchers from the University of Cape Town and Kruger National Park. The trip included visits to a number of field sites in Hluhluwe-Umfolozi Park and Kruger National Park (..pretty tough conditions to take..), where several studies are being conducted on the biotic and abiotic controls of savanna structure and dynamics. This part of the trip enabled all of us Aussies to build an understanding of the African savannas, and sparked fruitful discussions about what we had learned about our Australian savannas that may be applicable to the savanna systems of South Africa (..as well as providing an opportunity to enjoy some out-of-this-world game sighting here and there..).
During the South African trip Tracy spent a great deal of time with her head down termite mounds in an attempt to become familiar with the South African termite fauna. This was not always a comfortable African field experience given the number and variety of free roaming megaherbivores in the area! However being under the watchful eye of a game guard carrying a rifle (..I assume it was loaded..?) did help to slow the heart rate down a little. Finding termites in elephant poo was a new one for Tracy, as was the extremely high levels of grass-harvesting termite activity observed in some landscapes. Along with Alan, **Ben Hoffmann** continued to expose the South African researchers to the wonders of the African ant fauna. Alan and Tracy also participated in a workshop at Cape town University to develop future collaborative projects. Tracy, along with CSIRO colleagues **Garry Cook** and **Adam Liedloff** also presented a seminar at the university on "Soil Biota and Landscape Hydrology'.
Alan stayed on in South Africa where he was kept busy helping South African Parks establish an ant monitoring program at Kruger as well as training the newly appointed African researcher responsible for ongoing ant monitoring. Alan also visited the University of Potchefstroom, where he has been invited to collaborate on a range of ant monitoring projects. This will involve completing a collaborative paper on ants in relation to minesite restoration, as well as assisting with new ant monitoring studies, including the Sasol gas pipeline project in Mozambique, a UNEP desertification project in the Northwest province and a feral horse project in Namibia.
Upon her return back to earth after her South African expedition, Tracy read a paper at The Northern Territory Minerals Council (Inc.) Annual Environmental Workshop on 'The role of Soil Biota in Landscape Rehabilitation'. Alan also presented a paper at this workshop on 'Monitoring Environmental Health: Ants as Bio-indicators'. Tracy and Alan also presented

papers at the AES/Invertebrate Biodiversity and Conservation Conference in Hobart. Tracy spoke about 'The Functional Role of Soil Macrofauna in Restoring Soil Processes and Maintaining Ecosystem Health in Tropical Savannas: Results of Field Experiments' and Alan gave a plenary talk on 'Fire and Insects in Australian Tropical Savannas' as well as a paper on the 'Evolutionary Radiations of Ants in Arid Australia'. Ben Hoffmann has been working on an experiment that is testing two new poisons on the ginger ant *Solenopsis geminata*. He has also travelled to Kakadu to continue assessments of the eradication of ginger and big-headed ants (*Pheidole megacephala*). Ben also attended a Capacity Building in Indigenous Communities workshop in Darwin, and has also started sorting ant specimens from a NT DIPE project that is looking at the sustainability of didjeridu harvesting in the Barunga/Beswick/Manyallaluk regions.

Tracy DAWES-GROMADZKI

QUEENSLAND – NORTH

QDPI-MAREEBA

Stefano De Faveri from QDPI entomology group was one of the lucky few to gain promotion to Senior Experimentalist in the last round of the department's Technical Progression Scheme. Stef grew up in Mareeba and has been with DPI since joining as a cadet late in 1985. He cut his teeth in tobacco entomology with Ian Cunningham, before moving into pest management in tree crops such as mangoes. He has also had a significant recent role in a project on sweet potato weevil with **Bruno Pinese**. Stef is currently the Queensland leader of a national project on soil insect pests of potatoes that is funded by Horticulture Australia and led by **Stewart Learmonth** from WA. Stef and wife Joanne (Biometrician in Mareeba) have just become the proud parents of their second child, a daughter Lara. Stef and Joanne will be moving to Toowoomba in the New Year; Stef to undertake further study and Joanne to bolster her career as a biometrician in DPI.

Geoff Monteith is due back in Mareeba in late October. He and **Ross Storey** hope to finish work on an MS describing new dryland Qld *Onthophagus* while he is there. **Dave Rentz** is settling into life in the northern town of Kuranda. He has visited Ross Storey, curator of the Mareeba office of the Department of Primary Industries insect collection and will be helping him upgrade the collections small holdings of Orthoptera. **Paul Zborowski** is off to Borneo, camera in hand to photograph many of the islands 6 legged inhabitants. He and Ross Storey are happy with the second edition of their book 'A Field Guide to Insects in Australia' which has just appeared.

QDPI – EMERALD

Alison Shields reports that the 2003/2004 cotton season is well underway in the Emerald district although there is much less cotton being planted due to water restrictions. The team received excellent results last season in Area Wide Monitoring of Silverleaf Whitefly and other associated field trials with both Helicoverpa and Silverleaf whitefly. Building on this, field trials will be expanded this season including an exotic cotton varieties trial. **Ali-Nur Duale** has left the Emerald Entomology team and has been replaced by **Jennifer Blacklock**.

Entomology has been promoted recently in the local community through live and static insect displays at AgGrow, Science Centre Open Day and a classroom visit to Marist College. In September the team participated in a Myers Briggs Personality Typing workshop in Toowoomba. **Richard Sequeira** is soon to participate in the Northern CRC review in Kununurra.

AQIS –CAIRNS AND MAREEBA

Jodie Cheesman has returned to AQIS to provide much needed scientific support to the Far North inspectorate on a part time basis. Her position will involve identification of routine interceptions, delivering scientific training courses e.g. perishable and timber and stored product pests, and involvement in vector and bioassay disinfection programs. Jodie previously worked for three years with **Bill Crowe** and the AQIS Operational Science team in Brisbane. She was particularly interested in bostrichids intercepted from imported timber, artefacts and dunnage, and was involved in the Asian Honey Bee incursion at Hamilton Wharf. The return to work in some capacity is a breath of fresh air for Jodie, who has spent the last few years raising a young family.

Kerrie Huxham enjoyed 7 weeks long-service leave in July/ August returning to close the end of another fruit fly season. Total target fruit flies trapped in the Torres Strait this year were 100 *B. papayae* and 32 *B. trivialis*, with no Melon fly detected. Weekly baitspraying activities were spread over seven Torres Strait islands whereas male annihilation blocks were installed on eight islands. Forty- two extra response traps were installed, so it was quite a busy season. The NAQS (Northern Australia Quarantine Strategy) survey team including **Judy Grimshaw** and **Barbara Waterhouse** returned to Papua New Guinea, carrying out a very successful 13 day survey in August. In late September they also surveyed for new insect pests and weeds in the Lockhart River area of north Queensland.

Alison Shields and Jennifer Blacklock of QDPI, Emerald promoting Entomology at a recent Ag Grow function

KURANDA

Graeme Young from Kuranda is still in Sydney hoping the medical profession will patch him up sufficiently to enable him to return to north Queensland before Christmas. Although not wishing a cyclone on us Graeme is hoping for rain so he can continue his studies of *Segestidia* spp. We wish you well Graeme.

Kerrie HUXHAM

QUEENSLAND – SOUTH

DPI

Frank Page reports numbers of apple dimpling bug, *Campylomma liebkneckti*, have been high on stone fruit and apples during September- October with the warm, drought conditions at Stanthorpe. Western flower thrips were present in economically damaging numbers in orchards. The sporadic pests, the green mirid *Creontiades dilutus*, and the brokenbacked bug, *Taylorilygus pallidulus*, caused catfacing injuries to peaches in some orchards, but overall losses were minor.

Iain Kay attended the conference in Hobart following a week's holiday in Tasmania. It was great, but a lot colder, wetter, greener and hillier than home territory. Back at work he is finalising a large report on a HAL funded project with **Annice Lloyd** on *Heliothis* and fruit fly management in vegetables, and preparing for a new project on western flower thrips.

In September DPI entomologists **John Duff**, **Bronwyn Walsh**, **Bernie Franzmann**, **Dave Murray**, **Carrie Hauxwell** and **Paul De Barro** (CSIRO) joined other DPI staff, interstate researchers and funding body representatives to share their experiences with silverleaf whitefly around the State. The group has set up an e-mail discussion group to continue communication over the coming season.

AQIS

Bill Crowe identified a lone khapra beetle (*Trogoderma granarium*) larva discovered in a bag of Indian rice at Brisbane International Airport. As it was a small amount of rice, the owner opted to send it for destruction rather than treatment. There were also

three interceptions of warehouse beetle (*Trogoderma variabile*) identified from two ship's stores inspected in Brisbane and one from Gladstone. Warehouse beetle is established in Australia (not yet recorded from QLD, Tasmania, NT or WA), but given the difficulty of identification and the likelihood of multiple *Trogoderma* species being present when some are detected, all *Trogoderma* detections are treated as potential khapra beetle infestations.

A national review of vector monitoring at first ports as well as military instalments such as RAAF and RAN bases is currently underway (in the lieu of the **Richard Russell** report completed in 1998). **Sarah Russell** is being assisted by Canberra colleagues from the airport and seaport programs assessing the mosquito monitoring programs at high risk ports around Australia. So far Sydney and Brisbane have been assessed with visits to the international seaports and airports, Richmond and Amberley RAAF bases and Bulimba naval base. The next region to receive a visit will be far north Queensland and will occur towards the end of October. Once the review is complete a report containing recommendations and risk category ratings for the military bases will be drafted.

Sarah Russell also delivered a presentation on the AQIS perspective towards exotic mosquitoes (including risk imports and vector monitoring programs) to the Mosquito Management and Planning Course held at the end of August by the northern division of the MCAA. The course covered a number of topics including mosquito control in salt and freshwater habitats, the Dengue epidemic in north Queensland and local government mosquito control programs

Catherine Harvey paid a visit to the University of Queensland to obtain a mite ID from **Matthew Shaw**. Matthew is completing a PhD studying mites that live in various nests. Matthew identified the mite, which was intercepted off a Fijian mask, as a species of *Androlaelaps*, a laelapid mite that is a predator of other invertebrates and their eggs in nests, but may also be a bloodsucker! The mite was one of several Victorian specimens sent up for ID confirmation. See: <http://raptormites.babson.edu/skin_mites.htm>.

QUT – School of Natural Resource Sciences

The newly-established entomology component at QUT saw postgraduate entomology students **Brad McNeil**, **Mark Schutze**, **Eve White** and **Alexsis Wilson**, lecturer **Tony Clarke** and post-doc **Helen Nahrung** attending the AES conference in Hobart. The students presented a poster introducing their projects: Brad is working on host location and host selection of *Encarsia*, important natural enemies of white flies; Mark is studying population level differences in *Paropsis atomaria*, a pest of eucalypt plantations, using morphology, behaviour and molecular techniques; Eve's project examines the indirect insect-mediated interactions between the native daisy *Senecio lautus* and fireweed *S. madagascariensis* to ascertain whether the native species experiences reduced seed set, reproduction and recruitment in close proximity to the exotic species; Alex is working on the impact of frugivorous invertebrates on plant fitness and interactions between fruit flies and frugivorous vertebrates.

Tony Clarke also participated in "Science meets Parliament" in Canberra in October, a forum where scientists have the opportunity to inform politicians of the performance and potential of Australian science and technology.

AFRS.

Rose Broe and **Annerose Chamberlain** have commenced work with the lantana biocontrol project. Rose will be helping **Liz Snow** with studies on *Aconophora compressa* while Annerose will be helping **Tanya Grimshaw** with the rearing and release of the sap-sucking mirid, *Falconia intermedia*. Large numbers have been released at several sites in the past few weeks and there are promising signs with the insect persisting at all sites.

Michael Day recently spent two weeks in PNG presenting at a biocontrol of chromolaena workshop and then travelling around releasing and monitoring biocontrol agents for chromolaena. Michael reports that the moth *Pareuchaetes pseudoinsulata* is causing substantial damage to the plant in the Markham Valley, west of Lae and the gallfly *Cecidochares connexa* has established in seven provinces and has spread up to 10 kms in some areas.

Michael also spent time in Cairns attending a Lantana Weeds of National Significance Management Meeting. The two day meeting involved a field trip looking at lantana sites on the Atherton Tableland. *Falconia intermedia* has appeared to have established at two sites and persisting at another three sites. The rust *Prospodium tuberculatum* is still persisting at another three sites. Releases of both agents are continuing throughout Qld and NSW.

NRM

Peter Mackey has been appointed as Principal Scientist, Pest Management Research and Professional Leader, Alan Fletcher Research Station. The non-target attack of *Aconophora compressa* on fiddlewood continues to involve most of the biocontrol group and particularly **Mike Day**, **Dhileepan**, **Liz Snow**,

The Mitey Course, Adelaide

Mariano Trevino, **Peter Mackey** and **Bill Palmer**. The $0.5m upgrade of the quarantine facility at Alan Fletcher Research Station has been almost completed and will be officially opened in November. Several major changes were being made to improve the security and working conditions of the facility.
Raghu Sathyamurthy accompanied **Tim Heard** on a three week exploration trip to Mexico and Nicaragua to search for prospective biocontrol agents for various weeds of neotropical origin. The trip generated further collaborative work.

Bronwyn WALSH

SOUTH AUSTRALIA

A large contingent of South Australians headed off to the joint meeting of 34th AES AGM and Scientific Conference where Tasmanian hospitality and spectacular views eclipsed the unusually chilly weather. **Glenys Wood**, **Nancy Schellhorn** and **Dennis Hopkins** from SARDI attended, where Nancy presented 'Monitoring insect movement from refuge to crop: Conservation biological control in a *Brassica* system', and Dennis presented 'The use of the Sterile Insect Technique for the control of Mediterranean fruit fly outbreaks in South Australia. From The University of Adelaide: **Andy Austin** (paper), **Nick Stevens** (poster), **Tim Moulds** (paper), **Sylvia Clarke** (paper), **Marta Kasper** (paper - 2nd prize in student presentations), **Fraser Vickery**, **John Jennings** (paper), **Gary Taylor** (paper). From Flinders University: **Kirsten Benkendorff** (paper), **Michael Schwartz**, **Shannon Thompson** (paper), **Michael McLeish** (paper). From SA Museum: **Remko Leijs** (paper) and Uni SA: **Kathryn Schneider** (paper).

South Australian Research and Development Insitute
Cal Wellbourne from the State of Florida Department of Agricultural and Consumer Services and **Carl Childers** from the Citrus Research and Education Center, Institute of Food and Agricultural Sciences, University of Florida visited SA to share their wealth of knowledge of mite biology and taxonomy with a group of would be acarologists from most states. Both took time out to seek out some Australian mites visiting the Riverland, Sunraysia and Riverina to collect Brevipalpus mites from citrus orchards as part of an international study of the species complex associated with citrus.
SARDI is about to appoint a Research Officer to work on *Etiella* (lucerne pod borer) in lentils. In recent years *Etiella* has caused damage to lentil seed that has exceeded the thresholds set by industry. The project will be funded by GRDC and will be a collaborative effort with DPI staff based at Horsham.

Megan Leyson and **Angela Lush** attended the "Slugs & Snails – Agricultural, Veterinary and Environmental Perspectives" symposium, held in Canterbury, Kent, UK, on the 8th and 9th September. Angela presented a paper titled 'A novel method for the field study of mollusc movement using mucus trails', co-authored with **Geoff Baker** (CSIRO, Canberra). Megan presented a paper titled "Release and establishment in South Australia of *Sarcophaga penicillata* (Diptera:Sarcophagidae), a biological control agent for *Cochlicella acuta* (Mollusca:Hygromiidae)", co-authored with **Dennis Hopkins** (SARDI), **Suzanne Charwat** (formerly SARDI) and **Geoff Baker** (CSIRO, Canberra).

As well as attending the conference, Angela visited the University of Basel in Switzerland and the Institute of Plant Protection, Stuttgart, Germany. Highlights of the trip included visits to several farmers who employ the Integrated Farming Systems approach, and hence demonstrate a strong focus on IPM. Another key experience involved the observation of laboratory courtship and mating of alpine snails (later romantically released back into the Alps of course!). Megan also made a number of laboratory and consultative visits during her stay in the UK, including visits with Professor David Glen, Styloma Research & Consulting, Cheddar; Dr Bill Symondson, Cardiff University; Dr James Coupland, Coupland RDC, Bristol; Dr David Bohan, Rothamstead Research, Harpenden; and Dr Gordon Port, University of Newcastle. Megan's visit to the University of Newcastle was particularly memorable as she assisted with field trials at Close House, Heddon-on-the-Wall, and visited Hadrian's Wall during her lunch break!

The University of Adelaide

John Jennings attended the 14th meeting of the Council of Heads of Australian Entomological Collections in Hobart where he was elected as Chairman.

Andy Austin joined **David Yeates** and **Laurence Mound** as invited speakers at the recent "International Symposium on Phylogenetic Relationships Among the Insects" held in Dresden, German in mid September. The meeting was attended by 180 delegates from 14 countries, and represented the leading research groups world-wide studying the major evolutionary/biological transitions within the insects. The three -day program was judged a great success by the organisers, based on the quality of the presentations and volume of beer consumed".

Glenys WOOD

TASMANIA

University of Tasmania
School of Agricultural Science/CRC Sustainable Production Forestry

At the AES conference in Hobart oral presentations were made by 6 graduate students in the school and posters by two across a wide range of subject areas. Congratulations to **Cameron Spurr** for winning the best student oral presentation and **Katherine Harrison** for runner-up in the best student poster competition. Cameron has recently submitted his PhD and is currently running further research with industry partners on vegetable seed production. Following the conference **Toni Withers** (Forestry Research, New Zealand) spent 3 days with **Geoff Allen** visiting research sites and plantations and discussing *Uraba lugens* research options for controlling its recent invasion of New Zealand.

Dave de Little (independent Forest Health Consultant) reports that he has recently conducted two Forest Health training sessions with the CRC for Sustainable Production Forestry, and attended the recent Forest Health Committee meeting in Melbourne, representing the Tasmanian Forest Health Advisory Committee. Dave has also been working with Bayer Environmental Science testing a new systemic insecticide product for effectiveness against several insect pests of plantation eucalypts.

University of Tasmania / Freshwater Systems

Peter Davies is using macro-invertebrate assemblages identified from kick net samples collected from over 300 sites around Tasmania to help develop a biophysical classification or Tasmanian rivers. This classification will be a major component of the new Tasmanian Conservation of Freshwater Ecosystem Values framework being developed by a team managed by the Tasmanian Department of Primary Industries Water and Energy. Species level data on juvenile forms of mayflies, stoneflies and caddis, along with family data on a range of other groups have been used to classify the sites into over 20 assemblages across the state. The distribution of these assemblages is currently being modelled as an input into the overall river classification. In addition, an assessment of river condition will be developed which includes AUSRIVAS 'O/E' scores derived for some 430 sites across the state. The project also includes 'special values' assessments which will capture information on the distribution of threatened aquatic invertebrates (such as *Beddomeia* snails, crayfish and caddis), and 'hot spots' for aquatic invertebrate diversity

and endemism. Historical data from **Peter Tyler**, **Russ Shiel**, **Robert Walsh** and others on zooplankton and rotifer distributions are also being included, along with new data on distributions of burrowing and free living crayfish collected by **Alistair Richardson** and **Britta Hansen**. The project aims to assess conservation value and management priorities for all rivers, lakes and wetlands in the state as a major component of state water management planning and implementation, and as a 'context setting' and 'decision support' tool for development assessments and resource management. It is well funded and has strong backing from the current government, and is expected to 'deliver' early next year.

Queen Victoria Museum and Art Gallery

In September the first version of **Bob Mesibov's** online, illustrated identification guide to Tasmanian 'multipedes' went up on the QVMAG website <www.qvmag.tas.gov.au/zoology/multipedes/mulintro.html>. 'Tasmanian Multipedes' is an illustrated, online guide to the identification of the centipedes, millipedes, Symphyla, Pauropoda and velvet worms of Tasmania. The guide consists of more than 100 inter-linked Web pages covering more than 90 taxa, with roughly 170 colour images, 60 line illustrations and 80 distribution maps. An annotated bibliography of published and unpublished references is included for each of the five 'multipede' groups. The guide covers both native and introduced species.

From December to June 2004 QVMAG will be exhibiting the Australian Museum's collection of invertebrate images from their 2002 'Up Close and Spineless' photographic competition. Combined with this display will be the museum's own specially prepared exhibits on invertebrate diversity and abundance.

Forestry Tasmania

Simon Grove has continued working on a range of invertebrate-focused biodiversity projects, particularly examining the effectiveness of wildlife habitat strips in forestry areas, as well as being involved in organising the AES conference. Simon and **Jane Elek** both gave presentations at the conference. **Gabriel Warren** and **Belinda Yaxley** have continued the task of reorganising and databasing the Tasmanian Forest Insect Collection, with part-funding from Plant Health Australia through the Australian Plant Pest Database. **Dick Bashford** has been busy with the *Sirex* nematode inoculation program in northern Tasmania, and attended the CHAEC meeting in Hobart. FT hosted a visit by **Frederic Beaulieu** (University of Queensland) who has been using the laboratory while carrying out some doctoral research on mites in litter and dead wood at the Warra Long Term Ecological Research site in southern Tasmania.

Australian Antarctic Division

Penny Greenslade will be back with the Australian Antarctic Division in Tasmania again shortly to finish editing a book on Macquarie Island invertebrates. At the conference on Invertebrate Biodiversity and Conservation in Hobart in September, she discussed reasons for the low level of endemism and specialisation in the Macquarie Island invertebrate fauna.

Department of Primary Industries, Water and Environment

Michael Driessen writes that his team has sorted their pitfall material from a long-term project on the impacts of fire on terrestrial invertebrates of buttongrass moorlands to ordinal level, and that anyone who would like to see this fully labelled material from this globally unique ecosystem should contact him (Michael.Driessen@dpiwe.tas.gov.au). Michael is particularly keen to find an expert to take a look at the cockroaches. Michael is also investigating the population structure and life history of *Bobilla* spp (Orthoptera:Gryllidae) in buttongrass moorlands. They are particularly abundant in this habitat and appear to increase in abundance following fire. He'd be interested in making contact with other people working on this group or family.

Invertebrates and Environmental Change Conference

The Annual conference of AES was held in Hobart from 29th September to 3rd October, in combination with the biannual Invertebrate Biodiversity and Conservation conference. Over two hundred delegates attended. The local conference organising committee was ably chaired by **Geoff Allen**. He and committee members **Niall Doran**, **Michael Driessen**, **Simon Grove**, **Peter McQuillan**, **Alastair Richardson**, **Owen Seeman** and **Liz Turner** are happy with the way the conference panned out, and even happier that it's all over now. Just so we don't get too smug, Penny Greenslade offers these thoughts on the conference. She felt that the fusion of this meeting with the Entomology AGM had some disadvantages as, unlike previous meetings, there was little discussion of conservation and no publication from it is planned. Also, she felt that non-insect invertebrate specialists were less well catered for in some respects. However one advantage was that she was pleased to meet some old friends who normally only attend Entomological Society meetings.

Simon GROVE

VICTORIA

Department of Primary Industries, Tatura

At the end of September **Alex Il'ichev** attended the AES Conference in Hobart with an oral presentation about his current project "Area-wide mating disruption of OFM and Codling moth in fruit". This big project incorporates close collaboration with entomologists from Michigan State University on novel mating disruption technologies and counter seasonal field experiments in the Northern hemisphere. Recently, Alex received the honorary appointment as an Adjunct Professor in the Department of Entomology at Michigan State University, USA.

Executive Director of Primary Industries Research Victoria, **Clive Noble**, congratulated Alex on behalf of the Department and regarded this appointment as a high honour and a reflection of the international recognition for the work in pheromone based IPM at Tatura. Currently Alex is very busy in the field establishing trials on new Codling moth attractant for females and males in collaboration with NSW entomologist **Graham Thwaite**.

Mofakhar Hossain is now back from the USA. During his trip he met a group of leading Fig growers and some executive members of the California fig board. They were very positive about the mass-trapping work done to control *Carpophilus*. A group of leading peach growers informed him that the *Carpophilus* problem is increasing in the Californian stone fruit industry. While he was with USDA, Peoria, he tried to find a better way to stabilise the synthetic attractant for *Carpophilus* beetle. Mofakhar also visited a group of USDA scientists working with Small Hive Beetle. During his trip he learned that problems with this insect are severe in some parts of USA, particularly in Florida. He also made significant contacts with people in USA who are world authorities on pheromone extraction and they showed interest in working with DPI. Researchers in USDA at Gainesville are also keen to work with us because of our research into mass-trapping of *Carpophilus* beetle.

Department of Primary Industries, Knoxfield

Mali Malipatil attended the Council of Heads of Australian Entomological Collections meeting on 28 September prior to the Australian Entomological Society Conference (28 Sept - 3 Oct) in Hobart also attended by other Knoxfield based entomologists, **Linda Semeraro**, **Peter Ridland** and **Nancy Endersby**. Mali also visited the DPIW&E insect collection to examine the *Nysius* and other lygaeid bug specimens for his current study.

Nancy Endersby (DPI and CESAR) drove to Tamworth in September to collect *Plutella xylostella* and present the only entomological paper at the XXIII Australian Research Assembly on Brassicas. The assembly was very well organised by a team from NSW Agriculture and field trips to visit canola and mustard trials throughout central NSW were fascinating. Also of interest were the vast areas of turnip weed, *Rapistrum rugosum*, growing in paddocks and on roadsides throughout the state, another favoured host plant for *Plutella*!

Nancy Endersby and **Peter Ridland** visited **Jo Crosby** at DPI Warrnambool to talk to dairy industry advisers about *Plutella* in forage brassicas and to hear about the results of a survey of farmers conducted by Nadine Markham after last season's devastating outbreak. Everyone is hoping for a better season this year and weather conditions look favourable at this stage.

Cathy MANSFIELD, Nancy ENDERSBY

Entomological Society of Victoria

The Society again sponsored two bursaries at the Science Talent Quest organised by the Science Teachers Association of Victoria. Recipients were **Julia McCoey** for her photographic contribution 'Birth of a Butterfly' and **Eve Abdulla** and **Natasha Clarke** who conducted research on 'Pond coverings that prevent mosquito reproduction'.

Council is preparing its 2004 list of speakers and hoping that it can devote at least one meeting to entomological students from the Melbourne located universities. As a group we offer a fairly benign audience before whom to practise presentation skills. First we have to solve the problem of no data early in the year and too busy writing up at the end. However the joint benefits make it worth persevering with this innovation.

Ian ENDERSBY

PAPUA NEW GUINEA

Plant protection workshop

This has now been postponed to July 2004 with the venue yet to be decided between Unitech, Lae and Vudal University, Rabaul. With the departure of Bernard Pilon, **Lastus Kuniata** has been appointed as the new Workshop secretary. Further details will be published shortly regarding this workshop.

National Agricultural Research Institute

Anthony Clarke spent most of the 5 days in PNG at Aiyura discussing *Oribius* weevils. **Mark Ero** (Na-

tional Insect Collection) from Kilakila joined **Geoff Montieth** on a 10 day trip up to far North Queensland including Thursday Island on a mission to collect *Oribius* and related genera. **Richard Milner** and **Roy Masamdu** were in Fiji in May attending the 3rd Taro symposium where they are working on taro beetles with colleagues from Fiji, Vanuatu, Solomon Islands and Kiribati. **Bruno Pinese** visited PNG to hold discussions with **Otto Ngere** and **John Moxon** in Rabaul and **David Tenakanai** and **Majorie Kame** (both of NAQIA) Port Moresby on the red banded mango caterpillar.

Coffee Research Institute

In mid-May **David Putulan** (NARI) and **Nelson Simbiken** (CRI) jointly led a team to the Simbu and Western highlands Provinces to survey for *Oribius* weevil damage in coffee and other crops. This pest is serious on citrus crops with up to 60% defoliation of plants resulting in some small holders leaving citrus production. Papaya fruit flies have been reported in coffee in the past. However, in recent surveys for Papaya fruit fly no infestations of this pest were seen in coffee cherries which is good news indeed (but for how long?).

PNG Oil Palm Research Association

Bill Page is the new entomologist replacing **Rob Caudwell** who left in 2002. Bill is busy trying to sort out mechanisms governing diapause in *Sexava* pests of oil palms and also trying to understand ways to live with parasitic nematodes attacking the pollinating weevils. He recently visited Ramu to make an assessment on potential pests of oil palm there should oil palm be grown in the next 12-24 months.

Ramu Sugar Limited

Lastus Kuniata and **Gou Rauka** spent two weeks on the Torres Strait and the Cape York area with **Peter Samson, Rob Magarey** (both BSES) and **Iruan** (Indonesia) looking for pests and diseases of sugarcane. The most significant find was the leaf-hopper, *Eumetopina flavipes*, vector of Ramu stunt disease, found at Bamaga. Lastus also spent 6 weeks between March and April in Australia visiting various research organizations as part of the ACIAR John Dillon Memorial Fellowship.

Lastus KUNIATA

Notices

Council of Heads of Australian Entomological Collections

The 14th meeting of CHAEC was held in the Tasmanian Royal Society rooms at the Tasmanian Museum and Art Gallery on Sunday 28th Sept 2003, day before the Hobart AES conference.

The following officers were elected: President, John Jennings (University of Adelaide and Waite Insect & Nematode Collection); Secretary, Dick Bashford (Tasmanian Forestry Insect Collection); Treasurer, Glynn Maynard (AQIS). A full report of the meeting will be added to the CHAEC website in the next month or so. Visit http://pioneer.mov.vic.gov.au/chaec/. The site also has links to Australasian collections, trapping techniques, etc.

THE AUSTRALIAN ENTOMOLOGICAL SOCIETY INC.
NOMINATION FOR MEMBERSHIP

Please return to: Ms Nancy Endersby, AES Secretary, c/o Institute for Horticultural Development, Private Bag 15, Ferntree Gully Delivery Centre VIC 3156 AUSTRALIA

We, the undersigned

Proposer .....
(print name) (signature)

Seconder .....
(print name) (signature)
being financial members of the Society, propose the following for membership of the Australian Entomological Society Inc.

Title.....Initials.....Given name.....Family name.....

of (Address) .....

.....Post Code.....

Tel. .....Fax .....

E-mail ..... Degrees, etc. .....

Interests, experience and publications in entomology for publication in the News Bulletin *Myrmecia* (please attach brief resumé) .....

I accept nomination and undertake, if elected, to abide by the rules of the Society and to pay annual subscriptions by the date prescribed.

Signature .....**Date** .....

For **2004**: Annual subscription $110.00 (incl. GST); Electronic Journal only plus paper or electronic *Myrmecia* $99 (incl. GST) (payment MUST be received by 31st January 2004 if you choose this option); full-time student or retired members $55 (incl. GST), Joint membership $115.50 (incl. GST)

Students please attach proof of full-time student status
Payment in Australian dollars is required with nomination and may be made by MONEY ORDER, CHEQUE (made payable to Australian Entomological Society Inc.) or CREDIT CARD

Bankcard Visa Mastercard

Cardholder Name _____
Number _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ Expiry date _ _/_ _

Signature _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _I require a receipt YES/ NO

COUNCILLORS

Australian Capital Territory
Mr Kimberi Pullen
CSIRO Entomology
GPO Box 1700
Canberra, ACT, 2601
Ph (02) 6246 4263
Fax (02) 6246 4364
kim.pullen@csiro.au

New South Wales
Mr Aaron Simmons
The University of Sydney,
Orange
PO Box 883
Orange NSW 2800
Ph (02) 6360 5630
Fax (02) 6360 5626
asimmons@orange.usyd.edu.au

Dr Alan Clift
Department of Crop Sciences
University of Sydney
NSW 2006
Ph (02) 9351 2938
Fax (02) 9351 7504
clifta@agric.usyd.edu.au

Northern Territory
Dr Tracy Dawes-Gromadzki
CSIRO Tropical Ecosystems
Research Centre, PMB 44
Winnellie NT 0822
Ph (08) 8944 8400
Fax (08) 8944 8444
tracy.dawes-
gromadzki@csiro.au

Queensland
Ms Kerrie Huxham
NAQS AQIS
Centre for Tropical Agriculture
PO Box 1054
Mareeba QLD 4880
Ph (07) 4048 4600
Fax (07) 4092 3593
kerrie.huxham@aqis.gov.au

Ms Jane Royer
Qld Dept Primary Industries
21 Redden St
Cairns QLD 4870
Ph: (07) 4044 1640
jane.royer@dpi.qld.gov.au

Ms Bronwyn Walsh
Queensland Horticulture Institute
Dept Primary Industries
Gatton Research Station
Locked Bag 7, MS 437
Gatton QLD 4343
Ph (07) 5466 2222
Fax (07) 5462 3223
Bronwyn.Walsh@dpi.qld.gov.au

Papua New Guinea
Dr Lastus Kuniata
Ramu Sugar Ltd
P.O.Box 2183,Lae 411
Papua New Guinea
Ph 675 474 3299;
Fax 675 474 3295
lkuniata@ramusugar.com.pg

South Australia
Glenys Wood
SARDI
GPO Box 397
Adelaide SA 5001
Ph (08) 8303 9660
Fax (08) 8303 9542
Wood.glenys@saugov.sa.gov.au

Tasmania
Simon Grove
Conservation Biologist
Forest Research & Development
Forestry Tasmania
GPO Box 207
Hobart Tas 7001
Ph (03) 6233 8141
Fax (03) 6223 8292
simon.grove@forestrytas.com.au

Victoria
Dr Linda Thomson
CESAR
La Trobe University
Bundoora Vic 3083
Ph (03) 9479 2256
L.Thomson@latrobe.edu.au

Western Australia
Dr Tara Simmul
Serve-Ag, WA
11A Pike Street
Karrinyup WA 6018
Ph 0407 295 171
mendham@smartchat.net.au

SOCIETY REPRESENTATIVES

Entomological Society of New South Wales
E.E. Taylor
5 Endeavour Avenue
La Perouse
NSW 2036

Entomological Society of Queensland
Dr Jenny Beard
Department of Zoology & Entomology
University of Queensland
St Lucia QLD 4072

Entomological Society of Victoria
Mr Ian Endersby (acting)
56 Looker Road
Montmorency VIC 3094
Ph (03) 9435 4781
endersby@mira.net

SOCIETY HONORARY MEMBERS
Dr B.R. Champ
Dr I.F.B. Common
Dr C.N. Smithers

MACKERRAS MEDALLISTS
1984 Dr J.A.L. Watson
1986 Dr R.W. Sutherst
1988 Dr T.R. New
1990 Dr R.A.I. Drew
1992 Dr E.S. Nielsen
1996 Dr M.P. Zalucki
2000 Dr P.G. Allsopp
2002 Dr G.P. Fitt

IMMEDIATE PAST PRESIDENT
Prof. A.D. Austin
University of Adelaide,
Waite Campus, Private Mail Bag 1,
Glen Osmond, South Australia 5064

***MYRMECIA* EDITOR**
Laurence Mound
laurence.mound@csiro.au

ASSISTED BY:
Tish Silberbauer: lsilberb@metz.une.edu.au

CONSERVATION COMMITTEE
The Vice President & Secretary are *ex officio* members of the Conservation Committee

Convenor
Dr R. V. Gunning
Ph (02) 6763 1128
Fax (02) 6763 1222
rgunning@enternet.com.au

Prof Jonathan Majer (WA)
Ph (08) 9266 7041
Fax (08) 9266 2495
J.Majerj@curtin.edu.au

Dr T. New (Vic)
Ph (03) 9479 2247
Fax (03) 9478 1551
T.New@zoo.latrobe.edu.au

Claire Stephens (SA)
Ph (08) 8303 7276
Fax (08) 8379 4095
claire.stephens@adelaide.edu.au

Dr A. N. Andersen (NT)
Ph (08) 8944 8431
Fax (08) 8944 8444
Alan.Andersen@csiro.au

Dr D. P. Sands (Qld)
Ph (07) 3214 2803
Don.Sands@csiro.au

Printed by:
GOANNA PRINT
151-155 Gladstone St.
Fyshwick ACT 2609
Fax (02) 6280 7369

Distributed by:
Blackwell Publishing Asia
550 Swanston St
CARLTON VIC 3053
Ph (03) 9347 0300